

AMENDMENTS TO THE CLAIMS

This listing of claim will replace all prior versions and listings of claim in the application.

1. – 10. (cancelled)

11. (previously presented) A shearwall, comprising:

a central diaphragm, including

a top edge and a bottom edge generally defining a height of said central diaphragm,
first and second ends, extending between the top and bottom edges, generally
defining a width of said central diaphragm, and

a corrugated section extending at least partially between said top edge and said
bottom edge in between said first and second ends, said corrugated section forming at least
one corrugation, said at least one corrugation extending from said bottom edge and
terminating at a position between said bottom edge and said top edge.

12. – 13. (cancelled)

14. (previously presented) A shearwall, comprising:

a central diaphragm, including

a top edge and a bottom edge generally defining a height of said central diaphragm,
first and second ends, extending between the top and bottom edges, generally
defining a width of said central diaphragm,

a corrugated section extending at least partially between said top edge and said
bottom edge in between said first and second ends, said corrugated section forming at least
one corrugation; and

at least one embossment.

15. (previously presented) A shearwall, comprising:

a central diaphragm, including

a top edge and a bottom edge generally defining a height of said central diaphragm,

first and second ends, extending between the top and bottom edges, generally defining a width of said central diaphragm,

a corrugated section extending at least partially between said top edge and said bottom edge in between said first and second ends, said corrugated section forming at least one corrugation; and

at least one stiffening lip.

16. (cancelled)

17. (previously presented) A shearwall, comprising

a central diaphragm having a height, width and depth, each being perpendicular to each other, and a corrugation extending in the direction of said height of said central diaphragm;

first and second chords affixed to said central diaphragm at opposed edges of said central diaphragm and extending in the direction of said height of said central diaphragm;

a sill plate affixed to a bottom of the shearwall, said sill plate having a footprint at least as large as said central diaphragm and said first and second chords together; and

a channel in which said central diaphragm resides.

18. (original) A shearwall as recited in claim 17, said sill plate having a width greater than that of said channel.

19. -24. (cancelled)

25. (currently amended) A shearwall ~~as recited in claim 24, further~~ comprising:

a central diaphragm having a top edge and a bottom edge defining a height of said central diaphragm, first and second end sections defining a width of the central diaphragm, and a front plane and a rear plane defining a depth of said central diaphragm, said central diaphragm including:

a pair of rear planar sections extending at least part way between said top and bottom edges and being adjacent, respectively, to said first and second end sections, said pair of rear planar sections having a surface residing generally in said rear plane,

a pair of angled sections extending at least part way between said top and bottom

edges and being adjacent, respectively, to said pair of rear planar sections, said pair of angled sections extending from said rear plane toward said front plane and angling toward each other,

a front planar section extending at least part way between said top and bottom edges and being adjacent said pair of angled sections, said front planar section having a surface residing generally in said front plane; and

first and second chords affixed one each to said first and second end sections.

26. – 36 (canceled)

37. (currently amended) A shearwall ~~as recited in claim 34, where in~~ comprising:

a first member extending in the length direction between a top and bottom of the shearwall, the first member including at least a first corrugation;

a second member extending in the length direction between the top and bottom of the shearwall, the second member including at least a second corrugation; and

a central section of variable width in a direction transverse to the length of the shearwall for affixing the first member to the second member, the central section is welded to the first and second members.

38. (New) A shearwall comprising:

a central diaphragm having a top edge and a bottom edge defining a height of said central diaphragm, first and second end sections defining a width of the central diaphragm, and a front plane and a rear plane defining a depth of said central diaphragm, said central diaphragm including:

a pair of rear planar sections extending at least part way between said top and bottom edges and being adjacent, respectively, to said first and second end sections, said pair of rear planar sections having a surface residing generally in said rear plane,

a pair of angled sections extending at least part way between said top and bottom edges and being adjacent, respectively, to said pair of rear planar sections, said pair of angled sections extending from said rear plane toward said front plane and angling toward each other,

a front planar section extending at least part way between said top and bottom edges

and being adjacent said pair of angled sections, said front planar section having a surface residing generally in said front plane;

first and second side structural members formed one each on said first and second end sections; and

first and second edge structural members formed one each on said top edge and a bottom edge.

39. (New) A shearwall as recited in claim 38, wherein the first and second structural members are chords.

40. (New) A shearwall as recited in claim 38, wherein the one of the first or second edge structural members sits within a channel.

41. (New) A shearwall as recited in claim 40, wherein the channel is mounted to a sill plate.

42. (New) A shearwall comprising:

a first member extending in the length direction between a top and bottom of the shearwall;

a second member extending in the length direction between the top and bottom of the shearwall;

a central diaphragm welded to the first and second members, the central diaphragm having a top edge and a bottom edge defining a height of said central diaphragm, first and second end sections defining a width of the central diaphragm, and a front plane and a rear plane defining a depth of said central diaphragm, said central diaphragm including:

a pair of rear planar sections extending at least part way between said top and bottom edges and being adjacent, respectively, to said first and second end sections, said pair of rear planar sections having a surface residing generally in said rear plane,

a pair of angled sections extending at least part way between said top and bottom edges and being adjacent, respectively, to said pair of rear planar sections, said pair of angled sections extending from said rear plane toward said front plane and angling toward each other,

a front planar section extending at least part way between said top and bottom edges

and being adjacent said pair of angled sections, said front planar section having a surface residing generally in said front plane,

wherein the central diaphragm is

first and second side structural members formed one each on said first and second end sections; and

first and second edge structural members formed one each on said top edge and a bottom edge.